### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



# 

(43) International Publication Date 21 October 2004 (21.10.2004)

**PCT** 

# (10) International Publication Number

(51) International Patent Classification7:

B60N 2/48

WO 2004/089688 A1

(21) International Application Number:

PCT/KR2004/000866

(22) International Filing Date: 14 April 2004 (14.04.2004)

(25) Filing Language:

English

(26) Publication Language:

**English** 

(30) Priority Data: 10-2003-0023513

14 April 2003 (14.04.2003)

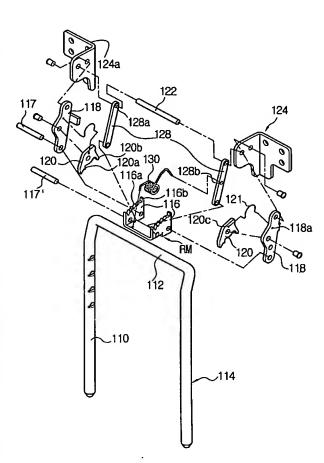
(71) Applicant and

(72) Inventor: CHUNG, Hae II [KR/KR]; 1-101 Taeyoung Apartment, 2Lot 9Block Yeounhee 2giku, Seo-gu, 404-180 Inchon (KR).

- (74) Agent: CHUNG, Tae Ryoun; DONG WON PATENT & TRADEMARK LAW FIRM, 12th Fl. Hyundai Jeonwon Officetel 1589-7, Socho-Dong, Socho-Gu, Seoul 137-070 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

[Continued on next page]

(54) Title: DEVICE FOR MOVING HEADREST BACK AND FORTH



(57) Abstract: A device for moving headrest back and forth for automobile in which a tilt adjusting device and a back and forth movement device are united into a single device is provided. The device comprises a stay (114), a ratchet member (RM), a tilt adjusting device (TAD), a check member (CM), a back and forth movement device (TAD), a first torsion coil spring (130), one or a pair of second torsion coil springs (121) and a mobile shaft (122) for the back and forth movement device (MD).

### 

GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.